

OBITUARIES OF MEMBERS OF THE OHIO ACADEMY OF SCIENCE: REPORT OF THE NECROLOGY COMMITTEE, 1988

The Necrology Committee of the Ohio Academy of Science consists of the following members: Emanuel D. Rudolph, Chair, The Ohio State University; Richard H. Mahard, Denison University; W. Louis Phillips, Certified Genealogist, Logan; and Ronald L. Stuckey, The Ohio State University. The author is identified at the end of each obituary.

Janice Carson Beatley (1919-1987)

Janice Carson Beatley, native Ohio botanist, will be remembered for her contributions toward the understanding of the wintergreen herbaceous flora of the deciduous forest region, the primeval forests of the unglaciated plateau in southeastern Ohio, and the ecological relationships of the vascular-plant flora of the Atomic Test Site in central-southern Nevada. Dr. Beatley was an outspoken advocate for ecological and environmental concerns while employed in seven different academic and research institutions and through active memberships in seven societies, whose mission is to save habitats and environments of natural areas. As professor of biological sciences at the University of Cincinnati (1973-87), Dr. Beatley taught courses in plant ecology and field botany and continued her research on the flora of the Nevada Test Site. Returning to Ohio and teaching in the same department where Dr. E. Lucy Braun, the eminent plant ecologist, taught for 34 years and maintained her lifetime affiliation, fulfilled a long-held dream. Death came to Janice at age 68, on 14 November 1987 in Cincinnati, Ohio.

Born 18 March 1918 in Columbus, Ohio, Janice was the second child of Earle and Alice Elizabeth (Carson) Beatley. She was educated in the Columbus public school system, graduating from North High School (1935). All of her college degrees were from The Ohio State University: B.A. (*cum laude*, 1940) with a major in zoology; M.S. (1948) and Ph.D. (1953), both in botany with research in plant ecology. She assisted in the general botany program and held appointments as an assistant, assistant instructor, and instructor, in addition to a predoctoral university scholarship (1953), a post-doctoral Mary S. Muehlaupt Scholarship (1957-58), and instructorships in general botany (1955-56). Other professional positions included science teacher, McArthur High School in Ohio (1943-45), instructor in botany, University of Tennessee (spring-summer 1952; summers 1953-55) and later acting assistant professor (summers 1957, 1959-60); assistant professor, East Carolina College, Greenville (1954-55); acting assistant professor, North Carolina State University, Raleigh (1956-57); research associate, New Mexico Highlands University (1959); assistant (1960-67) and associate (1967-73) research ecologist, Laboratory of Nuclear Medicine and Radiation Biology, University of California, Los Angeles, and the Nevada Test Site at Mercury, Nevada; associate professor (1973-77) and professor (1977-87) of biological sciences, University of Cincinnati; and research associate in the Herbarium of The Ohio State University (1983-87).

Janice Beatley's research efforts were ambitious, being stimulated and directed by Professor John N. Wolfe, under whom she completed both graduate degrees. Her master's thesis, "The Wintergreen Herbaceous Angiosperms of Ohio" (1948), was published in *The Ohio Journal of Science* (1956), and her doctoral dissertation, "The Primary Forests of Vinton and Jackson Counties, Ohio" (1953), was prepared as a *Bulletin of the Ohio Biological Survey* (1959). Dr. Beatley's career research was conducted at the Nevada Atomic Test Site in south-central Nevada, where for 13 years (1960-73) she studied the region's ecological-floristic relationships. At least 36 published papers and 11 abstracts are cited in her bibliography. Her most comprehensive study there resulted in a 316-page book, *Vascular Plants of the Nevada Test Site and Central-southern Nevada: Ecologic and Geographic Distributions* (1976).

Dr. Beatley's other research interests included a publication on "The sunflowers (*Helianthus*) in Tennessee" (*J. Tenn. Acad. Sci.* (1963) and on the "Distribution of buckeyes (*Aesculus*) in Ohio" (*Castanea* (1979)). The buckeyes were one of her favorite botanical endeavors, and Dr. Clara G. Weishaupt, her good friend and then curator of The Ohio State University Herbarium, was a frequent companion on these "buckeye" field trips. Another field botanical friend was Mr. Floyd Bartley who accompanied her while on field work in Jackson and Vinton counties.

Dr. Beatley was a member of a number of professional scientific organizations, including the Ecological Society of America, American Society of Plant Taxonomists, the Ohio, Kentucky, and Tennessee Academies of Science, California Botanical Society, Association of Southeastern Biologists, Southern Appalachian Botanical Club, and the Northern Nevada Native Plant Society. Because of her concerns for the preservation of the ecological conditions and habitats of organisms in natural areas, she held life memberships in the Sierra Club and The Nature Conservancy; and active memberships in the Friends of the Earth, The Wilderness Society, Defenders of Wildlife, National Wildlife Federation, and the National Parks and Conservation Association. She was elected into memberships of Phi Beta Kappa and Sigma Xi, The Scientific Research Society.

Janice Carson Beatley is survived by her older brother, Charles E. Beatley, Jr. of Alexandria, Virginia, and her younger sister, Mary Alice (Beatley) Jordan of Sunland, California, along with their six children and six great nieces and nephews. Graveside services were held 21 November 1987 at Oakdale Cemetery, Urbana, Ohio, where Janice was laid to rest next to her Carson grandparents and other family members. Memorial contributions may continue to be made to the Ohio Chapter of The Nature Conservancy.

RONALD L. STUCKEY

Donald J. Borror (1909-1988)

Donald Joyce Borror was born 24 August 1907 in Shepard, Franklin County, Ohio (now part of Columbus), the middle son of the Reverend Charles Herman and Dora Alice Caywood Borror. His father was a Methodist minister in the Ohio Conference; thus the family lived in several small towns in central Ohio while he was growing up, including Hilliard (1907-1912), New Holland (1912-1915), Alexandria (1915-1917), and Worthington (1917-1921). In 1921 they moved back to Columbus, where his father became minister of the Linden Heights Methodist Episcopal Church on Minnesota Avenue.

He became interested in natural history while in grade school, when he attended Camp Willson, near Bellefontaine, Ohio, run by the Columbus YMCA. He attended several summers as a camper and a nature counselor. He graduated from North High school in 1924.

He graduated *magna cum laude* from Otterbein College with a B.Sc. in biology and education in 1928. He received the M.Sc. from Ohio State University (OSU) in 1930, with a thesis on the genus *Oligoclada* (Odonata). He received his Ph.D. in 1935, on the basis of a dissertation on the dragonfly genus *Erythrodiplax*, under the direction of Dr. C. H. Kennedy.

In 1931 he married Jennie Elizabeth Killworth, whom he'd met some 10 years earlier; she'd lived a half block away from his father's parsonage. It became evident about the mid-twenties that she would be the only girl in his life, and even before they were married he began calling her "Mrs." — a name he used for her until her death in December, 1986. They had one son born in 1935.

Donald J. Borror became an instructor in Zoology at OSU in 1930, and was on the teaching staff there until his retirement in 1977, becoming a full professor in 1959. In his early years at OSU, he taught only general zoology, but began teaching ornithology in the late 1930's.

Teaching responsibilities were interrupted by World War II when he served during 1944-1946 as a lieutenant with the U.S. Navy. During summer and fall of 1944 he was in charge of insect control at the Marine Corps Air Station, Cherry Point, North Carolina. Later he served in the Pacific theater, assigned to the Second Marine Division on Saipan as a member of a Malaria and Epidemic Control unit. He also was with the occupation forces in Japan from late September, 1945 until late January, 1946.

He resumed teaching at OSU in the spring of 1946, where he became interested in making recordings of bird songs—an interest maintained until his death. Beginning in collaboration with his colleague Dr. Carl R. Reese, and later alone, he almost single-handedly built up over the years the second largest collection of recordings of animal sounds in the world, and what is probably the best collection of original recordings of the sounds of North American passeriform birds. Rather than by outside grants, he supported his research on bird songs by arranging for the royalties from the phonograph records he published to form a special University fund, and by doing the research himself. Over many years, he made some 14,000 recordings, representing about 400 species of birds and 125 additional animal species. He made original field recordings in all the contiguous 48 states. In the last 10 years of his teaching he offered a course in bioacoustics. He produced chapters in several books, nine phonograph records of bird song, and over 25 scientific publications on bird songs, the last published in 1987. Upon his retirement from OSU in 1977, the collection, equipment, reprints, etc. became the Borror Laboratory of Bioacoustics, currently housed in the Biological Sciences Building at OSU.

Throughout his professional career, Dr. Borror maintained an active interest in insects. In addition to his Ph.D. monograph, he published 16 papers on insects in refereed journals plus additional popular articles. He taught courses at OSU on insect taxonomy and external morphology. In 19 summers between 1938 and 1962, he was an instructor in Insect Study at the National Audubon Society's "Audubon Camp of Maine" at Medomak. He always felt that it was those summers that enabled him really to learn something about insects. At the time of his retirement, the insects he collected there (and elsewhere) went into a collection occupying most of the shelf space of two storerooms in the B & Z Building at OSU, most specimens bearing his collector's label.

Dr. Borror is best known as the senior author of *An Introduction to the Study of Insects*, with Dwight Delong, and in more recent editions, Charles Triplehorn, as junior authors. The text has become a standard college text in its field since its original publication in 1954. A 6th edition is currently in press. He is senior author of *A Field Guide to the Insects* in the Houghton-Mifflin "Peterson" series, with Richard E. White as junior author. He is also the author of *Dictionary of Word Roots and Combining Forms*, 1960. Thus, he's one of those rare individuals with a reputation in two major fields—entomology and ornithology. He was once asked by a colleague how he managed to do all this; his reply: "I do all my coffee drinking at mealtimes."

He died at age 80 on 28 April 1988 after a brief illness, leaving a son and daughter-in-law, Arthur Charles and M. Rae Borror; two grandchildren, Donald Richard and Valerie Jan Borror; and one great-grandson, Tyler Jason Borror.

ARTHUR CHARLES BORROR

George Henry Crowl (1910-1987)

Dr. George Henry Crowl, professor emeritus of geology at Ohio Wesleyan University, died 10 June 1987 at Grady Memorial Hospital in Delaware, Ohio, at the age of 77. A former chairman of the Department of Geology at Ohio Wesleyan (1947-1962), he will perhaps be best remembered for being a demanding, inspiring teacher who had a genuine interest in his students.

Born 10 April 1910 at Wooster, Ohio, he was the third child of Henry F. and Jessie Crowl. He attended Wooster College where he earned a bachelor's degree (1932) in geology. He acquired his love for geology in the small classes taught by Karl VerSteeg. He received his M.A. degree (1934) in geology from Harvard University.

During the depression years, he worked for Gulf, Tidewater, Shell and Carter (Humble) Oil Companies, traveling to Kuwait, Saudi Arabia, Venezuela and the Midwest of this country. He returned to academe, teaching briefly at Rutgers University, Vanderbilt University, Hamilton College and Pennsylvania State University, pursuing all the while his doctorate which he obtained from Princeton University (1950) while on a Libby Fellowship. His Ph.D. dissertation was entitled "Erosion Surfaces of the Adirondacks." He had joined the faculty of Ohio Wesleyan University in September, 1947, where he was an assistant professor and acting chair of the Geology Department. Upon completion of his Ph.D. he became chair of the Geology Department and served as such until 1962, having become an associate professor in 1951 and a professor in 1955.

At Ohio Wesleyan University, Dr. Crowl taught general geology, structure and geomorphology to undergraduates, frequently taking field trips throughout Ohio and adjacent states. During the summers of 1950 and 1956, he taught at The Ohio State University's geology field station at Ephraim, Utah. On leave from Ohio Wesleyan (1952-1954), he taught in Burma at the University of Rangoon. He also served as a consultant to the USAID Education Program at Sauger University, India (1966). Many summers between 1955 and 1964 were spent in Canada on Prince Edward Island, where Dr. Crowl served as technical officer (party chief) for the Geological Survey of Canada, working in his special field of interest, glacial geology. Summers were also spent researching in Greenland (1963, 1965) and Pennsylvania (1968-1986), the latter research in glacial geomorphology accounting for more than half of his publications.

Upon his retirement in 1975, Dr. Crowl was awarded the Adam Poe Medal of Ohio Wesleyan University. In "retirement" he taught one-semester courses at: Dalhousie University at Halifax, Nova Scotia (1976), University of Minnesota at Duluth (1978), Ohio Wesleyan University (1980), and College of Wooster (1981).

Dr. Crowl joined the Ohio Academy of Science (geology section, Vice-President 1956-1957) in 1948, and became a fellow in 1950 and emeritus in 1976. He also belonged to the Friends of the Pleistocene, Geological Society of America (fellow 1962), American Geophysical Union, American Association of Petroleum Geologists, and National Association of Geology Teachers.

Surviving are his wife, Mrs. Virginia (Anderson) Crowl of Albuquerque, New Mexico, whom he married on 19 October 1935, two sons, George H. Crowl, Jr. of Clovis, New Mexico, and Roland W. Crowl of Hudson, Massachusetts, a daughter, Mrs. Judith L. Dryhsen of Yuba City, California, and six grandchildren. Dr. Crowl's body was cremated and memorial services were held on 20 June 1987 at the Asbury United Methodist Church. His ashes were placed at Wooster, Ohio.

(This article is based in part on Dr. Richard P. Goldthwait's "Memorial To George Henry Crowl, 1910-1987" as published by the Geological Society of America, 1988.)

W. LOUIS PHILLIPS

William Eckman Goslin (1916-1987)

Dr. William Eckman Goslin, associate professor emeritus of botany and plant physiology at Auburn University, died suddenly on 17 October 1987 at the East Alabama Medical Center at Opelika at the age of 71. Born 24 February 1916 at Lancaster, Ohio, he was a son of Russell and Nettie Eckman Goslin. He graduated from Lancaster High School (1935) and served in the United States Navy (1942-1946) during World War II, attaining the rank of lieutenant.

He attended The Ohio State University (OSU) where he earned a B.Sc. degree (1940), an M.A. degree (1949) and a Ph.D. degree in botany (1959). While attending OSU he helped organize Alpha Phi Omega service fraternity and was later a member of Gamma Alpha. At Auburn, he was an advisor to the Delta Chapter of Alpha Phi Omega service fraternity.

At Auburn University since 1959, he taught general biology, botany, plant pathology, aquatic plants and pharmaceutical plants. Retired since 1981, he always enjoyed teaching and the day-to-day contact with students who considered him a "task master," but a fair and compassionate one.

Dr. Goslin was a member of The Ohio Academy of Science (plant sciences section) since 1942. In Alabama, he frequently served as a judge for local junior and senior high school science fairs and also participated in science fairs at the district and state levels. He belonged to the Sierra Club, Audubon Society and Isaac Walton League.

Actively involved in community affairs of Auburn, he belonged to the Auburn Civitan Club (a former president and secretary), Auburn Toastmasters, Auburn Beautification Council (former president), Chattahoochee Bird Club and the First Presbyterian Church of Auburn.

An Eagle Scout (1934) and the recipient of the Silver Beaver Award (1974), Dr. Goslin was active in the Boy Scouts of America for over 55 years. He served as a Troop Leader in Auburn and assisted in summer camp programs in the capacity of nature study advisor.

Surviving are his wife, Elizabeth McDaniel Goslin of Auburn, whom he married in December, 1949, and four children: E. Jane Burke, Anne E. Goslin, Daniel L. Goslin and Scott R. Goslin. Dr. Goslin was the youngest brother of Charles Goslin, well-known nature writer for the Lancaster, Ohio, Eagle-Gazette newspaper. Dr. Goslin's body was donated to the Department of Anatomy, University of Alabama, Birmingham. Memorial donations were directed to the Boy Scouts of America.

W. LOUIS PHILLIPS

James C. Gray (1902-1987)

Dr. James C. Gray, former chair (1960-1968) of the Biology Department at the State University of New York at New Paltz, died 2 July 1987 at Vassar Brothers Hospital in Poughkeepsie, New York, at the age of 84. A former resident of Cleveland, Ohio, where he taught at Western Reserve University (1929-1960), he moved to New Paltz in 1960 and taught there until his retirement in 1973.

Born 1 December 1902 at Schenectady, New York, he was a son of James and Violet Yorkston Gray. He earned a bachelor's degree (1925) and a master's degree (1927) from Syracuse University and received his Ph.D. degree from the University of Chicago (1929).

Dr. Gray joined The Ohio Academy of Science (zoology section) in 1930, became a fellow in 1961 and emeritus in 1974. He also belonged to AAAS (fellow), American Society of Zoologists, American Institute of Biological Sciences, Cleveland Technical Societies, Sigma Xi, The Scientific Research Society, Beta Beta Beta, and Kappa Phi Kappa. He was a past president of the Professional Men's Club in Cleveland and served on many university committees throughout his career.

Surviving are his wife, Arlisle Miller Gray of New Paltz, whom he married on 1 October 1933 in Sheboygan, Wisconsin, a son, James R. Gray of Wallkill, New York, and two grandchildren. Dr. Gray was a member of the Reformed Church of New Paltz to which memorial donations were directed. Private funeral services were held in New Paltz at the convenience of the family.

W. LOUIS PHILLIPS

Noel Paul Hudson (1895-1987)

Dr. Noel Paul Hudson, professor emeritus of microbiology at The Ohio State University (OSU), died 18 April 1987 in the Wesley Manor Nursing Home at Fruit Cove, Florida, at the age of 92. An eminent virologist, he became the fourth dean of the Graduate School (1946-1955) and served during the postwar expansion and readjustment of graduate enrollment. He subsequently held the position of assistant dean and secretary of the College of Medicine.

Born 9 January 1895 at Lincoln, Illinois, he was the son of George Gary Hudson, a minister, and Delia Ann Herndon Hudson. He spent his boyhood in Japan where his parents were missionaries. After graduating from James Millikin University in Decatur, Illinois (1917), he taught biology in Santiago, Chile. He served in the Sanitary Corps of the Medical Department of the United States Army (1918-1919), rising from private to second lieutenant.

He earned his Ph.D. degree in bacteriology from the University of Chicago (1923) and his M.D. degree from Harvard University (1925). He served as an assistant pathologist at Boston City Hospital (1925-1927); field director at the Internal Health Division of the Rockefeller Foundation (1927-1929), in which capacity he conducted important research on yellow fever in Africa; professor of bacteriology and hygiene at the University of Chicago (1930-1935); and joined the faculty of OSU in 1935 as professor and chairman of the Department of Bacteriology.

During World War II, Dr. Hudson was on leave from OSU studying typhus in Mexico (1940), as a member of the Rockefeller Health Commission in France and England (1940-1941), and as a civilian consultant on biological warfare to the Surgeon General's Office of the War Department (1943-1945).

During Dr. Hudson's tenure as dean of the Graduate School at OSU, enrollment increased from 2,128 in 1946 to 3,273 in 1953. Dean Hudson founded (1947) the *Graduate School Record* to which he contributed numerous articles and editorials. He served as president (1953-1954) of the Association of Graduate Schools in the Association of American Universities.

On 1 January 1956, Dr. Hudson resumed duties in the Department of Bacteriology as a research professor and in July, 1956 became assistant dean of the College of Medicine and chair of a faculty group that studied the post-graduate teaching program. He was the editor of volume two of the *History of The Ohio State University, College of Medicine* published in 1961, which covered the years 1934-1958. He authored more than 50 articles in scientific journals on subjects in bacteriology and the pathology and immunology of viral and bacterial infections.

Dr. Hudson became a member of The Ohio Academy of Science (medical sciences section) in 1937, a fellow in 1939, and emeritus in 1970. He belonged to the American Society of Tropical Medicine and Hygiene, American Society for Microbiology, American Academy of Microbiology, and American Public Health Association.

His retirement as research professor and assistant dean became effective 1 July 1966. At the 1966 autumn quarter commencement, Dr. Hudson was awarded the honorary degree of Doctor of Science in recognition of his service as a virologist and medical pioneer, teacher and administrator.

Preceded in death by his wife and two sons, Dr. Hudson's body was cremated in Jacksonville Beach, Florida. (This article is based in part on Robert H. Bremner's 1985 biographical account of N. Paul Hudson.)

W. LOUIS PHILLIPS

Dolores M. Landreman (1920-1988)

Dolores M. Landreman, retired technical writer for Battelle Memorial Institute, died 19 January 1988 at Riverside Methodist Hospital in Columbus, Ohio, at the age of 67.

Born 6 May 1920 in Wisconsin, she was the daughter of Robert and Mary Hyacinth Dogot Landreman. A graduate of Lawrence College at Appleton, Wisconsin, she received her master's degree in English from the University of Minnesota. A former teacher at Appleton Senior High School, she served in the United States Navy as a Wave during World War II.

Miss Landreman joined Battelle in 1959 as a technical editor for the former Mechanical Engineering Department. In 1970 she was asked to help establish a Proposal Center for Battelle-Columbus, followed by work in the Marketing Department where she was a marketing communication specialist. She retired from Battelle in 1985.

The Ohio Academy of Science was indeed very fortunate that Dolores volunteered her time and skills in compiling a technical writing guide for Ohio's high school students. Her *Technical Writing Style Guide*, published by the Academy, is distributed to high schools throughout the state. This publication serves as the basic guide for hundreds of Ohio students preparing scientific reports annually. In 1978, Dolores also prepared for the Academy our *Proposal Guide* which is responsible for noticeable improvements in the proposals being submitted by high school students. Her *Report Writing Style Guide* (1984) is a valuable companion to the *Proposal Guide*. Dolores joined The Ohio Academy of Science (science education section) in 1978.

A member of the Society for Technical Communication since 1956, she received their Distinguished Technical Communication Award in 1979 for her article "Inspiring Technical Communication Through Enhancement of Motivation in the High School English Class." She was also a member of the Technical Writing Teachers Association and the Columbus Literacy Council.

Surviving are her mother, five brothers, nieces and nephews. Funeral services were held at St. Matthias Catholic Church of Columbus, with burial in St. Mary's Catholic Cemetery at Kaukauna, Wisconsin. Donations were directed to the Legacy of Catholic Learning.

W. LOUIS PHILLIPS

Bernard S. Meyer (1901-1987)

Bernard Sandler Meyer, a long-time supporter of The Ohio Academy of Science and well known plant physiologist, died on 25 September 1987 at the age of 86. Born on 20 July 1901 in Nantucket, Massachusetts, B. S. Meyer spent much of his life in Columbus, Ohio. He received all of his degrees from The Ohio State University (OSU): B.A. 1921; M.A. 1923; and Ph.D. 1926. After two years with the Central States Forest Experiment Station, he returned to OSU as instructor (1928), moving through the ranks to assistant professor (1929), associate professor (1934), and professor (1940). He served as chair of the Department of Botany and Plant Pathology from 1946 to 1966, and of the department at the Experiment Station at Wooster from 1948 to 1966. In 1971, he retired as professor emeritus and later (1976) served as visiting professor for one quarter at the University of Cincinnati.

A highly respected plant physiologist, Meyer was the senior author, with D. B. Anderson, of the most used textbook in the field, *Plant Physiology. A Textbook For Colleges and Universities* (1939), revised in 1952, and a new lower level *Introduction to Plant Physiology* with additional authors in 1960, revised 1972. Although most of his over 30 scientific papers were laboratory-based, Meyer was interested in the out-of-doors and often went on field trips with his second wife, Grace, who survives him. He was knowledgeable about vegetation and floristics and used this knowledge in his wild flower gardening. Over the years, B. S. Meyer supervised the masters' degrees of 44 students and the doctoral degrees of 28. A member (1922) and fellow (1930) of The Ohio Academy of Science, he served as vice-president of the plant sciences section (1933) and business manager of *The Ohio Journal of Science* (1930-1941). Also, he held offices in other professional societies: American Society of Plant Physiologists (vice-president 1940, president 1943); Botanical Society of America (editor-in-chief *American Journal of Botany* 1946-1951, vice-president 1952), American Institute of Biological Sciences (governor 1958-1960, vice-president 1961), as well as holding membership in many others. In addition to recognition by election to several honorary societies—Phi Beta Kappa, Sigma Xi, The Scientific Research Society, and Gamma Alpha—he was honored by the Botanical Society of America with its Certificate of Merit for Outstanding Achievement in Botany in 1959.

A memorial service, attended by many of his colleagues, friends, and former students, was held on 18 October 1987. He was remembered for his quiet effectiveness and dispassionate advice-giving. He was a devoted scientist, dedicated teacher and administrator, and a solid citizen.

EMANUEL D. RUDOLPH

Charles Michael Oehler (1918-1987)

Charles Michael Oehler, senior scientist emeritus at the Cincinnati Museum of Natural History, died 9 December 1987 in Cincinnati, Ohio, at the age of 69. Born 15 September 1918 in Cincinnati, he was a son of Michael Charles and Addie Marie Oehler.

For virtually all his adult life Mr. Oehler was associated with the Cincinnati Museum of Natural History. At the age of 16 he became a member of the Museum's Junior Society of Natural Sciences. In 1939 he joined the Museum staff as a preparator and lecturer, and for the next four decades virtually every exhibit and class at the Museum bore the imprint of his extensive knowledge and skill. Even after his retirement in 1981 he remained highly active in exhibit and scientific work at the Museum, up until the time his terminal illness so sapped his energies that such efforts became impossible.

Mr. Oehler was one of the last of that rare breed of professionals without college or graduate degrees. Yet he was a recognized authority on the natural history of the Ohio-Kentucky-Indiana area, especially on the arachnology and the archaeology of the region. Nor had he any formal training in art, but he was, nonetheless, a master in that most demanding of artistic fields, the museum exhibit.

Mr. Oehler became a member of The Ohio Academy of Science in 1967 and was elected a fellow in 1981. He also was a member of the American Association for the Advancement of Science, the Society of Systematic Zoology, the American Arachnological Society, the British Arachnological Society, and the Centre International de Documentation Arachnologique-Paris. In addition, he served on the advisory board of the Ohio Biological Survey and on the Ohio Archaeological Council. In 1983 he received the President's Award of the Ohio Museums Association "for significant leadership in natural science museums," and in the same year he was presented the honorary award of the Association of Interpretive Naturalists "for outstanding contributions in the field of interpretation of our natural and cultural environment."

Surviving are two brothers, Jack and Calvin, a niece, Linda Schwarberg, a nephew, William Oehler, and his colleagues at the Cincinnati Museum of Natural History.

RICHARD ARNOLD DAVIS

Richard A. Popham (1913-1988)

Richard Allen Popham, who died on 3 February 1988 at age 74, was an ardent supporter of The Ohio Academy of Science, serving in many ways since he joined in 1939. Born on 29 September 1913 in Charleston, Illinois, he grew up there and attended Eastern Illinois State Teachers College (now Eastern Illinois University), obtaining a B.Ed. with honors in 1936. Under the influence of Professor Ernest L. Stover, he became interested in plant anatomy resulting in his pursuing graduate studies in botany at The Ohio State University (OSU). There he earned a master's degree in 1937, and a doctorate in 1940, specializing in plant anatomy and morphology, subjects that were to be his research and teaching specialties. A strong advocate of botanical education, he taught beginning botany until his retirement as professor emeritus in 1980, and even a few quarters after that. The summers of 1937 and 1938 were spent as special agent at the United States Department of Agriculture Dutch Elm Disease Laboratories at Morristown, New Jersey, and the summer of 1939 as plant anatomist at the Carnegie Institution of Washington Desert Laboratory in Tucson, Arizona, where he probably developed his interest in the Southwest. At OSU he began his professional career as instructor in 1940. During World War II he served as chief ballistician at the Scioto Ordnance Plant at Marion, Ohio (1942-1943), and superintendent of the Atomic Bomb Manufacturing Plant of the Manhattan Project in Los Alamos, New Mexico (1944-1945). It was in the latter

position that he had considerable responsibility for production of the first atomic bomb, for which he received the Army-Navy production award on October 16, 1945. Returning to OSU as assistant professor of botany in 1946, he became associate professor in 1950, and professor in 1968. During that period he taught one summer (1949) at the University of Oklahoma, was consultant for Battelle Memorial Institute in Columbus (1958-1969), and research collaborator for the Brookhaven National Laboratory, Long Island, New York (1964-1980).

His research resulted in over 35 papers and two textbooks: *Developmental Plant Anatomy* (1952); and *Laboratory Manual For Plant Anatomy* (1966). During his career, nine of his students obtained masters' degrees and four doctorates. Service to students and to science was characteristic of Richard Popham's bachelor life. He was faculty advisor and held various offices in the Gamma Alpha graduate fraternity, and advised many undergraduates and their organizations, including the Ohio Staters Campus Service Organization. He gave generously of his time to The Ohio Academy of Science as business manager of *The Ohio Journal of Science* (1949-1963), member of the executive committee (1951-1967, 1974-1978), chair of the finance committee (1958-1967), member of the administrative council (1951-1967), and president-elect and president (1964-1966). He served as business manager of the *American Journal of Botany* (1972-1982), and on the council of the Botanical Society of America during the same period. He was a charter member of the International Society of Plant Morphologists and the Society of Economic Botany. He supported botanical interests by memberships in many other societies.

Many honors came to Richard A. Popham. He was elected a fellow of the American Association for the Advancement of Science (1940) and of The Ohio Academy of Science (1944). Various honorary societies elected him to membership: Kappa Delta Pi in education (1935); Phi Epsilon Phi in botany (1936); Gamma Sigma Delta in agriculture (1937); the Society of the Sigma Xi in scientific research (1939), and Sphinx, OSU men's honorary (1962). In 1971 he became a partron of The Ohio Academy of Science, and in 1982 the Botanical Society of America awarded him its Certificate of Merit for Outstanding Contributions to Botany.

Richard A. Popham was a person of strongly held and voiced opinions. He was as demanding of himself as he was of others. His devotion to hard work for education and science were strong, and he made significant contributions to both.

EMANUEL D. RUDOLPH